

Fight fires with education

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We hear the same news from different places and at different times, or sometimes from the same places. A dramatic concatenation of catastrophic fires and fatalities has occurred through 2017: in Chile during January, in Portugal during June, in California during October and then again in Portugal and Spain during October. We are experiencing a surge in catastrophic fires of global dimensions and the challenge is to effectively manage wildland fires as essential ecosystem components while avoiding their negative societal impacts. Amongst the many aspects in the political and scientific agenda currently on the table, the role of education in managing wildfires is, surprisingly, not one of them.

The traditional response to increased fire activity has been increased suppression capabilities, such as more aerial resources, but as we become more efficient at putting off small fires, the few that escape quickly burn beyond extinction capacity and become large- or mega -fires. Globally, there is a lack of fire analysts with Master-level education or above, that can take savvy real-time decisions on how to manage properly each wildland fire, instead of simply attempting to put them all off. We argue that to effectively manage forest fires we need BS and MS programs that jointly prepare for emergency training and for integrated wildland fire management (forest ecology, evolution, management and fire suppression). The first barrier lies in research in itself, as science on emergencies, on ecology and on applied fire science has often been conducted independently from each other. However, catastrophic wildfires are becoming increasingly the norm, rather than the exception, and we need to develop better education programs that prepare professionals for this challenge. Fighting fire with education, and using science to inform education, should be at the forefront of our efforts towards diminishing the negative effects of fire under global change.